

Private Copy

[Reprinted from the "Journal of Obstetrics and Gynæcology of the British Empire," January, 1910.]

Primary Cancer of the Fallopian Tube

With a Second Series of Tables of Reported Cases
(No. 63 to No. 100)

BY

ALBAN DORAN, F.R.C.S.

Consulting Surgeon, Samaritan Free Hospital.



LONDON
SHERRATT & HUGHES

Manchester : 34 Cross Street

1910



Primary Cancer of the Fallopian Tube.

With a Second Series of Tables of Reported Cases (No. 63 to No. 100).

By ALBAN DORAN, F.R.C.S.,

Consulting Surgeon, Samaritan Free Hospital.

BEFORE considering this second series of tables of cases of primary cancer of the Fallopian tube, I will relate a case in my own operative practice. From the dates in the following report, it will be seen that I have not published it until after prolonged deliberation.

M.M., aged 60, a laundress, single, was sent to me on February 16, 1899, by Dr. D'Olier, of Arundel, on account of a large abdominal swelling. The patient stated that she had first noted it five months previously, and that it had increased rapidly, especially during the last three weeks before I examined her. It had also become very painful, particularly on the right side, and there was dysuria. The urine was of high specific gravity and loaded with urates. Early in January Dr. D'Olier opened a suppurating cavity, resembling a sebaceous cyst, in the posterior fornix.

The patient looked much older than sixty, but was not cachectic. The abdomen was considerably distended by a very tense tumour which reached nearly to the ensiform cartilage. The girth at the umbilical level was $31\frac{1}{4}$ inches, and three inches lower 33 inches; the distance from the ensiform cartilage to the umbilicus was 6 inches, from the umbilicus to the pubes $8\frac{3}{4}$ inches. The fundus of the uterus could be defined immediately above the pubes in front of the tumour. The uterus was displaced a little towards the right, and the tumour descended into Douglas's pouch and the left fornix; the right was free.

The patient was a unipara. The catamenia had ceased at about the age of forty-seven. The patient informed me that a regular show of blood began again when she was fifty-seven, and that the last show was observed about six months before I first saw her. There was no rise of temperature or pulse, but the patient suffered from two rather acute attacks of abdominal pain on February 17 and 21.

Operation. On February 23, 1899, I operated, with the assistance of Mr. Targett. The abdominal incision exposed a cyst with dull white, very vascular walls, containing several pints of a reddish-brown fluid with cholesterine crystals. After excising some adherent omentum, I enucleated the cyst from the left broad ligament which it had opened up very deeply; I noted that the uterine part of the left Fallopian tube ran over its upper surface and contained papillomatous masses. Some growths in the lowest part of the cyst had perforated its wall and grown over the back of the uterus and Douglas's pouch. There were strong adhesions between the capsule and the intestines inferiorly, and the sigmoid flexure ran on the capsule. The uterus was not enlarged and the right appendages had undergone senile atrophy. There was much oozing. I closed the greater part of the capsule by suture and packed its cavity with iodoform gauze, removed on the second day.

The case looked very unpromising, but the patient rallied from the operation and returned home in fairly good health and quite free from pain or dysuria about a month after the operation. Dr. D'Olier informs me that she died of a recurrence of cancer internally, apparently, as far as can be ascertained, within two years of the operation.

Descriptions of the Parts Removed. I examined the amputated parts immediately after the operation, and found that the uterine portion of the left Fallopian tube ran into the cyst, and not over it, as in the case of a "parovarian cyst." Mr. Targett, who had assisted me at the operation, made a thorough examination of the tumour, so that every part was investigated. This involved the destruction of the specimen, but a complete inspection of its morbid histology was more important than its preservation. The sections were made in the laboratory of the Clinical Research Association. Mr. Targett preserved for me a slide showing the papillomatous growth invading the tubal wall, with the following note:—

"This section is made from the least dilated portion of the Fallopian tube, and it shows the lumen filled with a villous growth almost as large and delicate as a fimbriated papilloma of the bladder. However, the evidence of malignancy in the section rests on the presence of certain solid ingrowths into the lumen, and definite foci of invasion of the muscular coat of the tube. The disease must therefore be described as a primary villous carcinoma of the Fallopian tube, with secondary infection of an ovarian cyst, lymphatic glands, uterus, etc." (See Figs. 1 and 2.)

The ovarian cyst did not bear more than a few patches of papilloma, although one had perforated its walls and infected adjacent parts.

As its date, 1899, will testify, I have delayed for years the publication of this case, just as I followed up for years the Wells-

AUTHOR'S CASE OF PRIMARY CANCER OF THE FALLOPIAN TUBE.

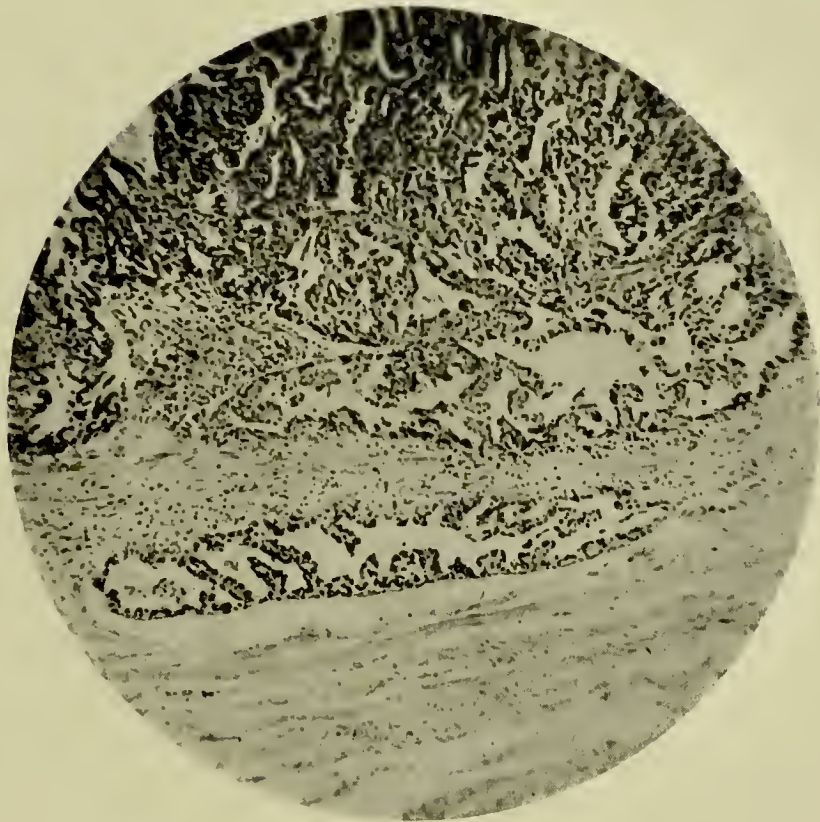


FIG. 1. Section of the wall of the Fallopian tube. A villous growth, almost as delicate as a fimbriated papilloma of the bladder, springs from the mucosa. The long gap in the muscular wall lined with a similar growth probably indicates an involution of the mucosa independent of malignant changes.



FIG. 2. Another section taken from the tubal wall near the former, showing a definite focus of invasion of the muscular coat of the tube by solid ingrowths from the villous growth on the mucosa.



Digitized by the Internet Archive
in 2016

<https://archive.org/details/b22467233>

Bickersteth case of papilloma of the tube in order to make sure that it was not malignant.* I particularly did not wish to rush into print, the more so as having written several papers on primary cancer of the Fallopian tube, it might be thought that I was too eager to add, under my own name, a case hurriedly investigated and of doubtful authenticity. I left the examination to Mr. Targett, who had noted the relations of the tumour when he assisted me in removing it, and who examined it with great care, without bias and taking nothing for granted. Since then I have studied and reviewed the work of others; I have particularly borne in mind Zangemeister's advice about care in investigating the primary source of a papillomatous new growth when it involves both the tube and the ovary. After these ten years of deliberation I have come to the conclusion that I may feel justified in adding my case to the first hundred of reported instances of primary cancer of the Fallopian tube.

My attention, whilst from time to time I studied this case, was turned to some observations by the late Professor Pfannenstiel on two cases of tubo-ovarian cyst which, very probably, were identical with my own,† but the primary seat of the malignant tumour is doubtful in both. In the first, the patient, whose age is not given, had a large unilateral tubo-ovarian cyst, as big as a child's head. The Fallopian tube opened widely into the ovarian part of the cyst. A big mass of new growth, papillomatous adeno-carcinoma, projected from the ostium of the tube into the ovarian cavity, but, excepting close to the tube, there were no malignant growths on or in the walls of that cavity. The patient died a year later, after an operation for the removal of some cancerous supra-clavicular glands. In Pfannenstiel's second case the patient was a nullipara, aged 58. She was the subject of bilateral tubo-ovarian cyst. The cysts were remarkably symmetrical in character; the ovarian portion was unilocular. The orifice of the Fallopian tube was distended by a mass of malignant papilloma as big as a walnut, which projected into the ovarian portion of the tumour, which bore a few minute papillomatous growths. The patient, let it be remembered, died eight *weeks* after the removal of these malignant cysts, and then the uterus and also the *stomach* were found to be the seat of cancer.

Pfannenstiel reasonably concludes that, as far as the tubo-ovarian cyst is concerned, the cancer originated in the tubal portion in both his cases. In the first the tube was very probably the primary seat of the growth, but in the second it might well have been infected from elsewhere. Still it might, after all, have been the primary seat. Unfortunately the clinical history is somewhat defective, nor

* The patient was living twenty-three years after the operation. See "Diseases of the Fallopian Tube" in Allbutt and Eden's *System of Gynecology* (1906), p. 504.

† Pfannenstiel, "Die Erkrankungen des Eierstocks und des Nebeneierstocks," *Veit's Handbuch der Gynäkologie*, Vol. iii, Pt. 1 (1898), p. 406.

are notes of the operation published. In my own case I made notes immediately after the removal of the tubo-ovarian cyst, and, as above related, all appearances implied that the new growth had arisen in the cyst and was only beginning to invade neighbouring parts, whilst dissection of the cyst indicated that the primary seat was the tubal mucosa.

[Since this communication was sent to the press two important communications on tubal cancer have appeared, namely: Boxer, "Beitrag zur Kenntniss des Tubenkarzinoms," *Monatsschr. f. Geb. u. Gyn.*, Nov., 1909, of which an abstract appears on p. 57 of this number of the Journal; and Bryden Glendining, "The spread of Carcinoma by the Fallopian Tube," in this number of the Journal, p. 24.]

ANALYSIS OF THE SECOND TABLE.

The total in my "Table of over Fifty Complete Cases," already published in this JOURNAL [vol. vi, p. 285] amounted to 62, including Nos. 54 to 62, which had been submitted to my notice too late for their inclusion in the Tables, but were given in abstract. Primary sarcoma, primary mixed tumours and chorionepithelioma* are not included.

The remainder, here tabulated, amount to 38. I will now add a summary of the tables, in continuation of that which I included in an article, "Diseases of the Fallopian Tubes," which appeared in the second (1906) edition of Allbutt, Playfair and Eden's *System of Gynæcology*. The summary (p. 510 *et seq.*) will serve not only for the article in the *System*, but also for the Tables in the JOURNAL, on which in fact they were founded.

Age. In the 38 cases here tabulated, 10 of the patients were between 45 and 50 years of age when the disease was detected; 7 between 50 and 55; and 5 between 55 and 60. On the other hand, 6 patients were between 40 and 45. Thus, as has already been observed, primary cancer of the tube is most frequent at and for a few years after the menopause. Two patients (No. 73 and 100) had passed their sixtieth year—in the earlier table Nos. 35 and 38 were older—the former (Pawlik and Novy) being 70. Three patients were between 35 and 40; there were 4 of that age in the earlier tables. Lastly, excluding 3 where the age is not recorded, there are 2 under 30, namely, No. 71, age 29, and No. 88, only 27 years of age. This is the "record" case, the minimum age in the entire 100.

Catamenial History. As before, the record of this important factor is so inaccurate in a large number of the cases as to be of no value for the present purpose.

* See Risel, "Zur Kenntniss des primären Chorionepithelioms der Tube," *Zeitschr. f. Geb. u. Gyn.*, Vol. lvi (1905), p. 154, with 5 of vesicular mole in the tube. See also *Zentralbl. f. Gyn.* (1905), p. 1327; and Dr. F. J. McCann, "Sarcoma of the Mesosalpinx," *Proc. Roy. Soc. Med.*, Vol. ii, Obst. Sec., p. 183.

Fertility. No less than 19 patients had been once or oftener pregnant, 8 were reported as sterile, and in the remaining 11 there is no record. Most probably, as the first table indicated, parous women are the most subject to the disease in question.

Duration of Symptoms. In 1 case (No. 67) the symptoms had not been observed for over one month; in 2 (Nos. 73 and 82) they had been noted for about 6 weeks; in 3 (Nos. 68, 78 and 81) for about 3 months; in 2 for about 4 months; in 6 for about 6 months; and in 8 for about a year. In 2 (Nos. 69 and 90) there was a definite and very important history of one special symptom, menorrhagia and watery discharge for 3 years. In most of the other cases, even excluding ten where no report is given, the information under this heading is quite unreliable; thus in No. 87 and No. 92 the special symptoms were masked by an ovarian and a uterine tumour respectively.

Pain. In 25 out of the 38 cases there was pain, in 9* no pain, and in 4 there is no mention of this symptom. In 4 out of the 25 painful cases the pain was acute (Nos. 69, 72, 74 and 86). The cause, let it be remembered, was not uniform. In No. 72 the cancer had extended to the rectum and the pain occurred during defæcation. In No. 74 there were distinct attacks, and the tubes contained dark fluid. In No. 86 coagula were passed, and the diseased tube formed a big cyst. Lastly, in No. 69 there was watery discharge, so that pain was present in only 1 of the 10 cases in this table where watery discharge was noted. Turning to the first table, pain was present in 13 (Nos. 3, 6, 9, 15, 20, 25, 28, 30, 31, 35, 55, 58 and 62) of the 17 where there was discharge of this type, and it was acute in Nos. 15, 20, 25, 31, 55 and 62. No mention is made of pain in Nos. 2, 23 and 59, nor in 45 where a uterine fibroid was present. In No. 2, which I described myself in 1888, the patient made no complaint of any pain excepting at the periods, and the watery discharge had continued for three years—indicating papilloma becoming malignant. Thus we may conclude that the cardinal symptom of primary cancer of the tube involves pain when there is any obstruction to the escape of the watery fluid secreted by the new growth, as in No. 74, and in the great majority of the seventeen in the first table. No. 86, where coagula were passed, with pain, may have been of a kindred type, but there is no mention of watery discharge, and it is not certain that the hæmorrhage was not uterine.

Presence of a Swelling. In all the 38 cases excepting Nos. 73, 76, 80 and 97 a swelling of some kind was noted, ranging from a distinct resistance in one of the lateral fornices to an abdominal tumour, but in several instances there was an ovarian or uterine

* Including No. 76, where there was ascites.

tumour as well. In Nos. 73, 80 and 97 there probably was no difficulty in defining a swelling, but the fact was not reported. Lastly, in No. 76 there was ascites, masking several other symptoms. The patient was of intemperate habits, and cirrhosis was suspected, but the liver showed no signs of disease when inspected at the operation. The effusion into the peritoneum was certainly due to the new growth. This case is of unusual clinical interest.

Discharge is the most important of all the symptoms, granting that there is clearly a tumour more or less distinct from the uterus. It was free and watery in no less than 10—namely, Nos. 68, 69, 70, 79, 80, 84, 87, 88, 90 and 91. Let it be remembered that sanious watery discharge was noted in No. 2 in the first table, and also in Nos. 3, 6, 9, 15, 20, 23, 25, 28, 30, 31, 35, 45, 55, 58, 59 and 62, making 17 in all, which, added to the 10 in the new tables, makes up 27. Thus in over twenty-seven per cent. of recorded cases of primary cancer of the Fallopian Tube free watery discharge was a marked symptom. “Over” must certainly be written down for the sake of accuracy, as in No. 48 “sanious discharge” and in Nos. 60 and 61 “free leucorrhœa” was registered, which means that one or more of the 3 should probably come under this category, whilst in other instances the symptom must have escaped record. More is said here on this subject under the heading of “Pain” and “Ascites”; under the latter mention is made of Violet’s doubtful case where the discharge was jelly-like.

Fibroid Tumour of the Uterus. This complication occurred in no less than 4 cases, namely, Nos. 64, 80, 82 and 92. In the former tables 5 such cases were included, making altogether 9 per cent. This interesting combination of the two forms of new growth in adjacent parts was first reported by Ries in an article on “Primary Papilloma and Primary Carcinoma of the Fallopian Tube,” in the *Journal of the American Medical Association*, Vol. xxviii (1897), p. 962. Watkins, of Chicago, removed the tumour and the fibroid uterus (No. 18, first table). Ries figures the parts removed. Mr. Bland-Sutton figures a case in his own practice in an interesting “Contribution to the Surgery of the Uterus,” in the *Clinical Journal*, April 2, 1904 (No. 50, first table).

Cystic Tumours of the Ovary (exclusive of tubo-ovarian cyst) complicated 4 cases in this table, namely, Nos. 86, 87, 89 and 96. There were 7 in the old table, therefore the total will amount to 10 per cent.

Ascites. This was noted in two cases only, Nos. 67 and 76. As there were metastatic deposits in the parietal peritoneum and the serous coat of the uterus, which might account for the ascites, we cannot feel certain that either case was similar to Le Count and Newman’s (No. 37, old table); where the ostium of the tube was patulous, so that the tumour was the malignant homologue of Spencer Wells’s case of

innocent papilloma of the tube which I reported in 1879, the patient being alive when last heard of twenty-three years after the operation. Thus, while free watery discharge from the vagina was recorded in 27 per cent. of the 100 cases here collected, evidence of peritoneal effusion caused by escape of discharge from the tube into the peritoneal cavity is only to be found in one case of primary cancer of the Fallopian tube, although it was a marked symptom in the first instance of innocent papilloma of the tube recorded in full. That is to say, the ostium as a rule becomes closed very early when the tumour is malignant. As there are 4 cases in the first table where ascites is recorded and only 2 in this table, the percentage will be 6—much lower than might be estimated on *a priori* reasoning. For the tumour is generally villous or papillomatous, and it is well known that a free growth of this kind developed on the surface of the ovary, tube or mesosalpinx will cause free intraperitoneal effusion even when its proportions and extension are still very limited.

Violet's remarkable case, which was probably a myxo-sarcoma, and is therefore excluded from the charmed circle of the tables and related below separately, must always be borne in mind in relation to ascites and free discharges in association with tubal tumours. In this instance the pink, sticky jelly was discharged both into the vagina and into the peritoneal cavity.

History of Pelvic Inflammation. There was a distinct history of pelvic inflammation in 9 cases—Nos. 65, 70 (12 years' duration), 74 (gonorrhœal), 77, 80, 84, 85 (gonorrhœal), 88 (puerperal) and 95. Besides these 9, we must add, as suspicious, 12 cases where the new growth was found in dilated tubes, nearly always the result of inflammatory changes, namely, 71, 73, 75, 76, 78, 79, 81, 82, 84 (pyosalpinx), 86, 90 and 92. The opponents of the theory that primary cancer develops in tubes the seat of old inflammatory changes would maintain that the new growth is the cause, not the sequence of these changes. In 17 there was no reliable clinical history.

In May, 1899, I stated that "Papilloma of the Fallopian tube appears to have an inflammatory origin. . . . The papillomatous vegetations may undergo malignant degeneration. In short, cancer of the tube appears to spring from papilloma of the tube." Säger and Barth in 1895 declared that primary cancer of the tube always develops at the seat of a chronic and most frequently suppurative salpingitis for long quiescent. Orthmann (see reference Nos. 77 and 78 in the table), after a review of 84 cases, came to a similar conclusion. I have dwelt on that authority's views in an abstract notice of his review of the series of instances of primary cancer then known to medical literature, in the JOURNAL, Vol. xi, 1907, p. 72. Altogether, now that over 100 cases are at our disposal, the inflammation theory seems to be the most reasonable, though Zangemeister,

Witthauer, Stolz and others are probably correct when they deny that inflammatory changes invariably precede the development of tubal cancer. Yet the most recent researches (Boxer) greatly favour the older theory.

Unilateral or Bilateral. In 12 cases the tumour was reported as bilateral; of the cases registered as unilateral, the right tube was affected in 10, the left in 12. Two others were unilateral, but the side was not recorded. In 2 no statement is made. In the old table the bilateral cases amounted to 24, therefore the proportion in the two tables combined will be 36 per cent. On the other hand, the relative frequency of cancer in the right tube (20) and in the left (17) in the old table is the reverse of that in the new table, and it is highly possible that in more than one case the disease in the opposite tube was overlooked. One fact remains certain, cancer of the tube is bilateral in over one-third of all cases on record.

Pathology of the Tumour according to reported Cases.

Ten are reported as "cancer" simply—Nos. 68, 70, 71, 72, 73, 81, 87, 95, 98 and 99.

Twelve, "papillary" or "papillomatous cancer"—Nos. 63, 64, 66, 67, 69, 74, 75, 78, 80, 83, 88 ("encephaloid") and 96.

One, "primary villous carcinoma"—No. 100.

Three, "epithelioma"—Nos. 86 (papillomatous), 89, 92 (infiltrating atypical).

One, "atypical proliferation of epithelial cells"—No. 65.

Four, "adeno-carcinoma"—Nos. 84, 85 (papillomatous), 93 (ditto) and 94.

Two, "alveolar carcinoma"—Nos. 76 and 77 (papillomatous).

Two, "cylindrical epithelioma"—82 and 91.

One, "closely packed spheroidal cells in long columns"—No. 97.

One, "perithelioma"—No. 90. It is possible that this tumour was a sarcoma; Gosset himself was of this opinion, but the drawing of the tumour laid open suggests that it was an advanced cancer invading the walls. The original paper, quoted under No. 90 in the table, deserves study.

One papilloma showing no signs of malignancy under the microscope, yet rapid recurrence after removal by operation, No. 79. This tumour may be compared with Kaltenbach's (No. 3, first table), which also proved malignant, and with the case of papilloma of the tube, which I described in 1879, associated with formidable symptoms, yet quite innocent, as was proved by its after-history.

Treatment. Eight were treated by "hysterectomy," the precise nature of the operation not being given—Nos. 63, 74, 80,* 81, 86,† 90 and 95 ("a radical abdominal operation"). In No. 93 the removal of the uterus was a secondary operation.

* In Nos. 64, 80, 82 and 92 there was fibroid tumour of the uterus.

† Suppurating ovarian cyst in this case.

One uterus removed by hemi-section—No. 70.

Six, "total hysterectomy"—Nos. 72 (described as Wertheim's operation), 64,* 82,* 83, 92* and 94.

Eighteen, removal of cancerous tube or tubes only—Nos. 65, 66, 67, 68, 69, 71, 73, 75, 76, 77, 78, 79, 84, 85, 91, 97, 93 (subsequent hysterectomy) and 99.

Four, ovariectomy and removal of the diseased tube—Nos. 87, 89, 96 and 100.

One, apparently no operation—No. 98.

Thus all but one case certainly underwent operation.

Results. Out of the 8 cases operated on by "hysterectomy" (without any note of the method of operation) none were fatal; in 5 the report was not reliable—Nos. 81, 88, 90, 95 and, lastly, 86, in which instance the patient died 14 months after the operation from an accident. It appears that she was in good health at the time. In 1 case there was no recurrence at the end of 8 years, and the patient was under the care of so reliable an authority as Zweifel. In 2 there was relatively late recurrence—three years in No. 80, and thirteen months in No. 74. In addition to these cases, hysterectomy was performed as a secondary operation in No. 93, four months after removal of both tubes. The patient died shortly after the removal of the uterus.

There is no after-history to case 70, where the uterus was removed by hemi-section.

Out of the 6 total hysterectomies no case died of the operation. Recurrence was speedy in 2—No. 64 (4 months) and No. 83 (death $3\frac{1}{2}$ months after operation). To these must be added 1 case where Wertheim's operation and excision of the rectum was performed; sudden death occurred eleven months later, but it is not certain that it was due to recurrence. In 2—No. 82 and 94—there was no after-history. Lastly, in 1 case there was no sign of recurrence ten months after the operation.

Out of the 18 cases of removal of the tube or tubes only, there were 2 deaths from the operation—Nos. 69 and 99; in 2, there was fairly long immunity—No. 75 living for 2 years and 1 month, No. 85 for 3 years and 1 month. Two were free from recurrence about a year after operation—Nos. 71 and 73. In 9 recurrence was speedy—Nos. 65, 66, 68 (where, it must be remembered, metastases were found at the operation), 76, 77, 78, 79, 91 and, lastly, No. 93, where hysterectomy was performed four months later. In 3 there was no reliable report—Nos. 67, 84 and 97.

Out of the 4 ovariectomies, recovery was speedy in 2—Nos. 87 and 100; indeed there were metastases, not believed to be malignant at the time, observed at the operation. In 2—Nos. 89 and 96—there was no reliable after-history.

Thus, there were only 2 deaths, which, added to 4 in the first

table, makes a mortality of 6 per cent., but it is not certain that one or two more, where no statement of the result of the operation was published, recovered. Taken as a whole, the after-histories are, on the other hand, unsatisfactory, as might be expected in a disease not easy to diagnose. Yet, as these tables show, primary cancer of the Fallopian tube is clearly not a malady of extreme rarity. As in at least 27 per cent. of all cases distinct and more or less free watery discharge was present, it is clear that when that symptom is found to be associated with a pelvic or abdomino-pelvic tumour, that an exploratory operation should be performed, and that if a tumour of the tube is detected the uterus and the remaining appendages should be removed as well as the affected tube.

ADDENDUM.

Since the present table was completed and the appended analysis prepared, I have received the original report of the following case. It has been referred to, without any details, by some recent German authorities, and I have not found an abstract of the case in any British or foreign medical work or newspaper. I therefore add the case to those tabulated, as chronologically it is older than several others in the table, and, besides, it is well reported by the author, who also adds drawings to his thesis. (Z. DANDELSKI, "Primäres Tubencarcinom," Inaug. Dissert., Würzburg, 1907).

The patient was a married woman, aged 64 (*sic*). The periods had been normal; the date of the menopause is not given. At the age of forty she aborted at the sixth month, and two years later she was delivered normally of a child at term. The puerperium was uncomplicated. At the age of forty the patient had an attack of some inflammatory affection. Three years later she was troubled with severe pain in the right side of the abdomen and sacro-pelvic region, which had lasted two months when she consulted Dandelski. He could define a tumour of the size of a fist in Douglas's pouch and the right fornix, and a small mass as big as a hen's egg in the left fornix. The patient was kept under observation for over a year. In the meantime a kind of catamenial period seems to have set in; there were attacks of pain and frequent vomiting, without emaciation or hæmorrhages. The pelvic swellings do not appear to have increased greatly in size. Dandelski* operated on June 25, 1906. The outer part of the right tube was dilated into a big cyst, torn during separation from deep pelvic adhesions. A quantity of yellow serum escaped, and it was found full of a medullary papillomatous mass. It was amputated, and as on inspection the left tube was

* Or Professor Hofmeier. It is not quite clear who was the operator. No hospital and no names are mentioned in the report, but the author thanks Prof. Hofmeier, at the end of the thesis, for assisting him in his labours.

found dilated to the size of a pigeon's egg close to its uterine insertion, the uterus was also amputated, above the cervix, with the left tube and the right ovary. The left ovary was very small and so strongly adherent to deep pelvic structures that it was not removed. The operation was performed under stovain anæsthesia. There was diplopia on the ninth day, but no febrile reaction during convalescence. On October 8th, 1906, the patient was examined. There was no evidence of recurrence, and the stump of the cervix was movable. It appears that the patient was in good health early in 1907.

The microscopic appearances of the papillomatous growths which sprang from the mucosa of the dilated portion of both Fallopian tubes are described in full, and Dandelski concludes that the new growth was a papillomatous adeno-carcinoma. There was no evidence of sarcoma. He adds that these tubal cancers usually tend to develop as papillary masses because they grow towards the lumen of the tube and are slow to invade the deeper structures in the tubal walls. The uterine mucosa showed evidence of endometritis diffusa, but no metastases could be detected.

The clinical report and the remainder of Dandelski's thesis are of high value, and the author includes some instructive tables, but there are misleading inaccuracies, especially in the quotations from American sources, clearly at second-hand. Thus Watkins'* case is given twice—under Ries and under Watkins—and without full details, such as the important fact that the uterus was the seat of a fibroid tumour. Boldt's is also included. The entire report given in the *New York Medical Record*, Vol. lii (1897), p. 66, informs us that Dr. Boldt exhibited, at a meeting of a medical society, a Fallopian tube and ovary removed on "that day" *per vaginam*. The tube was suspected to be the seat of ectopic gestation, but a pathologist "*thought* it was cancer of the tube, in all probability primary." Lastly, in Dandelski's case, the age of the patient, 64, must be a misprint for 44, as there is reference throughout the clinical report to the periods, as though their presence was nothing remarkable, whilst in the author's summary about the age of reported cases he makes no mention of his own, although he expresses his doubts about the authenticity of Pawlik and Novy's (No. 35 in my own series) where the patient was 70.

Malignant Myxoma. The following case† must not be overlooked by British and American workers. Unfortunately no report of the microscopic appearances of the growth has been published.

The patient was 59 years of age. She had borne four children, the last thirty years ago. The menopause had been established for two years, before which time there had been menorrhagia. The

* No. 18 in my own tables, 1st series, No. 24 in Zangemeister's.

† Violet, "Tumour maligne de la Trompe," *Lyon Médical*, May 22, 1904, p. 1028.

puerperia were all normal, and there was no history of pelvic inflammation. The patient was admitted into hospital complaining of free discharge of a pink, glairy and sticky fluid. There was ascites, and the uterus was enlarged, the fundus rising above the pubes, its surface was irregular. A tumour, as big as an orange, lay to its left. The patient at first refused operation, and was kept under observation for three months. During that space of time there were three attacks of hæmorrhage, two very severe, about 120 grammes being lost on each occasion. On several other occasions quantities of the pink, sticky fluid were expelled from the vagina; it resembled semi-liquid currant jelly. At the end of the three months the patient begged that something should be done. The peritoneal cavity was distended with the pink sticky fluid, which also had been discharged externally; the serous membrane itself and the intestines bore no new growth. The tumour was removed; the right uterine appendages were found to be healthy, but the uterus clearly contained no new growth. The patient's condition, however, was so unsatisfactory that the operator did not attempt a hysterectomy. The tumour looked like a kidney; it consisted of the outer part of the left Fallopian tube greatly distended, and bearing a new growth of unusual appearance in its interior. This growth seemed made up of vesicles mostly of the size of currants, with others as big as walnuts developed by fusion of smaller vesicles. All contained the pink sticky fluid which had entered the peritoneal cavity and been discharged externally. Violet found that it was a malignant tumour undergoing myxomatous degeneration, but the promised microscopic report has never, it appears, been published. The growth was possibly a sarcoma. There seems little doubt, judging from what we know of free watery discharge in genuine cases of primary tubal cancer, that the tube was the primary seat of this doubtful new growth, but unfortunately the uterus could not be examined.

Cases Incomplete, or References not at Hand.

Lvow, "*Wratsch*," No. 35, 1903. Patient aged 50. Papillomatous cancer of the left tube; recurrence six months and a half after its removal.

Roche, "Carcinome primitif de la trompe, utérus fibromateux," *Journal de Méd. de Bordeaux*, March 1, 1903. Patient, aged 44, subject for some time to pains in the left side of the lower part of the abdomen. Removal of both tubes; they were greatly dilated, and the left bore a cancerous growth.

D'ANNA and BORGNA. I have not been able to procure the original reports of the cases published by these Italian authorities. Stolz includes the name only of D'Anna in his well-known monograph; Dandelski gives no more than that name, and does likewise in the case of Borgna. For the benefit of future workers who may

get at back numbers of two Italian papers in foreign libraries (I have failed to find them in London), I will give the references: D'ANNA: "Epithelioma primitivo della Tromba." "Archivio e Atti della Società italiana di chirurgia" (1896), pp. 699 and 707. BORGNA: "Un caso di epithelioma primitivo della Tuba." "Giorno di Gin. et di Ped. Torino," No. 24, p. 394-400.

Lastly, space forbids me to dwell on *Innocent Papilloma*, *Sarcoma* and *Chorionepithelioma* of the Fallopian tube. Since the publication of Sängér and Barth's, Macrez's and Quénu and Longuet's tables, Tédénat has reported two cases of papilloma, apparently innocent, together with No. 74 in this table. Future writers on this type of growth must not omit Watkins's second tubal tumour reported by Ries (together with No. 18 in the older table). Violet's remarkable myxomatous tumour is noted above; it was probably a sarcoma. No. 90 in this table (Gosset) may be a sarcoma. Since Risel, a case of primary chorionepithelioma of the Fallopian tube has been published by Ushkoff in the Moscow *Med. Obozren*, Vol. lxxvii (1907), p. 869, but I have not been able to obtain the report. Lövgqvist's case was published in our pages, in abstract, in December, 1909. A note of Franz's case of lymphangioma of the tube will be found in the JOURNAL for November, 1909, p. 353.

No.	Age, married or single	Children; menstrua- tion	Side of tumour	Chief symptoms.	Duration of symptoms before operation.	Operation; Result.
63	47 M.	5 children; catamenia regular	R.	Crampy hypogastric pains, chiefly left side; tense elastic swelling size of man's head in right side pelvis and Douglas's pouch	1 year	Supravaginal hysterectomy, appendages removed; free abundant adhesions. Recd free from recurrence 8 after operation
64	51	Menopause 2 years	R. and L.	Ill 4 years. Irregular mass about size of apple rose above pubes on left, behind it a fibroid connected with uterus	4 years	Total abdominal hysterectomy "right salpingectomy, oöphoro-salpingectomy." covered; recurrence in metrium 4 months later
65	37	— recently, irregular	L.	8 years' stomatoplasty for right hydrosalpinx, left hydrosalpinx fixed to abdominal parietes. Abdominal pains, hernia of cicatrix, irregular uterine hæm- orrhages	—	Excision in part of left seat of a new growth, appendage appeared normal months later tumour reached umbilicus; explosion operation; nothing could done. Death 4 months later
66	49	Menopause 1 year	L.	Dysuria, constipation, no bleed- ing; soft tumour left side pelvis, burst during bimanual palpation	—	Removal of a tubo-ovarian 1 year later, operation free currence; death shortly after
67	45 M.	1 child menopause	R. and L.	Hypogastric pains; bilateral abdomino-pelvic tumour, ascites	Pain 1 month	Removal of both appendages
68	50	2 children; 8 years	R.	Abdominal pain, sanious watery discharge; abdominal swelling	3 months	Removal of both appendages metastases pelvic peritoneum left side; tumour outer right tube; 11 days later fluid in peritoneum
69	41 M.	Sterile; menorrhagia	R. and L.	Menorrhagia, severe; intermen- strual pain—free watery dis- charge. Mass right side pelvis, uterus displaced to left. Enema before operation caused hæmor- rhage per rectum; fistulous opening detected	3 years	Removal of appendages fibroids; uterus fixed covered over by dilated tube; right tube strongly herent. Death 84 hours operation; no post mortem
70	46 M.	1 child	R. and L.	Attack, pelvic inflammation 12 years; 1 year hypogastric pains and free discharge, watery, tea- coloured, odourless fluid; uterus fixed; mass right fornix rising above groin, smaller mass left fornix	1 year	Uterus removed by hemi- with appendages. Recovered

Character of tumour.	Other parts involved.	Operator.	Reporter and reference
tube formed a thin-walled r full of soft papillary ; right ovary and left dages normal	No evidence of cancer elsewhere	Zwei- fel	Zangemeister, "Ueber primäres Tubencarcinom," 'Beiträge z. klin. Chirurg.,' vol. xxxiv, p. 96 (1902)
tube as big as a black- ing, filled with papillary ; incipient papillary can- ght tube (myoma in an- uterine wall)	—	Anuf- rief	<i>Id.</i> , "Zur Kasuistik des primären Tubenkarzinoms," 'Monatsschr. f. Geb. u Gyn.' vol. xx (1904), p. 753
: in left tube showing al proliferation of epi- cells	Speedy diffusion of the growth over pelvic organs	Tomson	<i>Id.</i> , 'La Gynécologie,' Feb. 1905, p. 70; 'Journ. d'Obst. et de Gyn. de St. Petersbourg,' Nov. 1904
be seat of a papillomatous beginning to infect the a cyst into which it	Speedy diffusion after second operation	Orth- mann	<i>Id.</i> , 'Zeitschr. f. Geb. u. Gyn.,' vol. xlv, and 'Monatsschr. f. Geb. u. Gyn.,' April 1905, p. 571
r papillomatous cancer of tubes	Metastases (not papillary) in ovaries and parietal peritoneum	Pompe van Merder -voort	<i>Id.</i> , 'Zentralbl. f. Gyn.,' 1905, p. 597
us tumour as thick as a ostium admitted a sound	Metastases, serous and probably visceral	Keitler	<i>Id.</i> , 'Zentralbl. f. Gyn.,' 1905, p. 630
ed medullary growth, left smaller growth visible h ostium, right tube; ant papilloma both sides	Rectum perforated 4 inches above anus by new growth, right tube	Culling- worth	<i>Id.</i> and Lockyer, "Carcinoma of the Fallopian Tubes," 'Trans. Obstet. Soc.,' vol. xlvii, p. 263
tube size of orange, left of Tangerine, full of te-coloured fluid; cauli- masses springing from l, cancerous	Ovaries healthy	Rollin	<i>Id.</i> , "Epithélioma primitif des deux trompes de Fallope," 'Annales de Gyn. et d'Obstét.,' July 1905, p. 436

No.	Age, married or single	Children : menstrua- tion	Side of tumour	Chief symptoms.	Duration of symptoms before operation.	Operation ; Results
71	29 —	Sterile ; regular dysmen- orrhœa	R. and L.	Dilated tubes and retroversion detected during examination for cause of sterility ; no pain nor discharge	—	Excision vermiform ventro-fixation of uter- ine tubes ; removal of both tubes, removal of small cysts right 14 days later removal of left ovary and rest of ovary and some omentum recurrence 1 year later
72	55	—	R.	Recent hæmorrhages, severe pain on defæcation ; uterus enlarged, mass right fornix	"For months"	Wertheim's hysterectomy excision of 6 inches off uterus ; recovered ; died 3 months later
73	60 M.	0 children ; menopause 8 years	R. and L.	Abdominal pains, chiefly right side ; no discharge of any kind	"Some weeks"	Removal of appendages and ovaries ; recovery ; no sign of recurrence 11 months later
74	36 M.	0 children ; (married 14 years)	R. and L.	(Gonorrhœa 14 years) ; recently leucorrhœa ; attack of acute abdominal pain 2 months ; tumour in each fornix, right tumour rising into iliac fossa	9 months	Removal of uterus and appendages, resection of perito- neum ; Douglas's pouch ; re- covery ; death from recurrence 1 year later
75	55 M.	Menopause at 50	L.	Hypogastric pains relieved by yellow discharge, temporarily ; mass in left fornix	4 months	Removal of left appen- dage and small cysts left ovary and ligament ; recovery ; death recurrence 2 years 1 month after operation
76	43 M.	Sterile ; regular	R. and L.	Slow abdominal enlargement, painless, marked ascites ; cir- rhosis of liver suspected (alcoholic)	5 months	Removal of appendages and tube burst during opera- tion ; much friable tissue es- caped ; floated in the ascitic fluid tube similar, smaller, removed ; recovery ; 3 months later then patient lost sight of
77	53 M.	1 child, 1 abortion ; menopause 10 years	R. and L.	Senile colpitis, foetid discharge, pelvic pains ; mass right fornix and Douglas's pouch ; incarcerated umbilical epiplocele	A few months	Operation for hernia ; removal of both appendages ; right hydrosalpinx, size of egg ; recovery ; recurrence 3 months later
78	49	Uncertain if ever pregnant ; menopause 1 year	L.	Bearing down pains ; difficult de- fæcation ; to left of uterus fluctuating tumour size of small foetal head (burst during ex- amination)	3 months	Removal of left appen- dage and tubo-ovarian cyst ; recovery recurrence 1 year later ; mass removed from pelvis ; death 3 months afterwards

Character of tumour.	Other parts involved.	Operator.	Reporter and reference.
tubes seat of primary oma (Leary, Boston, U.S.)	Universal adhesions at first operation, but no metastases	Hare	<i>Id.</i> , 'Boston Med. and Surg. Journ.,' May 25 1905
y cancer of right tube	Rectum invaded	Cullen	<i>Id.</i> , 'Bulletin Johns Hopkins Hospital,' Dec. 1905 XVI. 3
l hydrosalpinx bearing	Uterus invaded	Fehling	<i>Id.</i> , 'Lehrbuch der Frauenkrank- heiten,' 3rd ed., p. 306; and private correspondence for clini- cal history
bes formed tumours bear- uberant masses of malig- apilloma, and dark fluid	Pelvic peritoneum invaded; after operation bladder perforated by new growth	Tédenat	<i>Id.</i> , 'Archives provinciales de Chirurgie,' No. 3, 1906, p. 129
be obstructed and dilated, as small hen's egg; ant papillomatous patches cosa	No metastases observed at time of operation	Schar- lieb	Doran, 'Allbutt and Eden's System of Gynæcology,' 2nd ed., p. 507, footnote
bes greatly dilated and with highly vascular soft —alveolar carcinoma	Metastases on serous coat, uterus and parietal peritoneum only (no evidence of hepatic cirrhosis)	Zum Busch	Private correspondence (read before Hunterian Society, Nov. 1906)
atous alveolar cancer in hydrosalpinx; incipient left tube	Universal adhesions, no meta- stases detected	Orth- mann	<i>Id.</i> , "Zur Kenntniss malignen Tubenbildungen," 'Zeitschr. f. Geb. u. Gyn.,' vol lviii (1906), p. 395
tube full of papillary	Ovarian part of cyst showed a few metastatic growths on its inner wall	Everke	Orthmann, <i>ib.</i> , p. 379

No.	Age, married or single	Children : menstruation	Side of tumour	Chief symptoms.	Duration of symptoms before operation.	Operation ; Result.
79	49 M.	1 child (29 years) ; menstruation becoming irregular	R. and L.	(No history pelvic disease) ; pain left side abdomen about a year ; 6 months free escape fluid from vagina ; emaciation ; tumour half way to umbilicus	1 year	Removal of tubes with 1 part of right ovary (firmly adherent in pelvis) ; left tube during extraction ; recurrence ascites developed ; ex laparotomy 9 months later ; malignant deposits ; rapid development of ascites
80	40	? menstruation regular	L.	Vaginal discharge over 20 years, at first leucorrhœal, then serous, ultimately profuse periodical watery discharges ; pains iliac regions	Many years	Abdominal hysterectomy ; removal of appendages ; subserous fibroid in uterus ; 1909 mass in Douglas's pouch and metastatic growth of cancer
81	42 M.	Sterile ; menstruation regular ?	R.	Perfect health, till recent irregular hæmorrhage ; hypogastric tumour, rapid growth ; no pain, no discharge ; tumour hard above pubes, fluctuating below, in Douglas's pouch	3 months	Removal of uterus and appendages ; cystic part of uterus burrowed very deeply into rectum ; recovery ; patient lost sight of
82	51 M.	2 children ; menstruation irregular	R.	Menorrhagia ; for several weeks severe pain ; multiple fibroids diagnosed	6 weeks	Vaginal hysterectomy ; (strong adhesions) ; uterus and appendages removed from multiple myomata ; rigid uterus ; a solid tumour adherent to fundus ; left hydrosalpinx
83	57 M.	1 child (33 years)	R.	(No history pelvic disease) ; recently hypogastric pains ; tumour each side uterus, right larger ; sanious leucorrhœa for 8 days before operation	Several months	Removal of uterus and appendages ; dense adhesions ; right tube, parametritis ; later pleurisy, bloody sputum ; paracentesis ; death 3½ months after operation ; no post-mortem
84	45	0 children	L.	(History of chronic pelvic inflammation, probably gonococcal) ; recently free, watery offensive vaginal discharge ; abdominal pains ; hypogastric tumour, lower part almost filling pelvic cavity	12 months	Removal of both appendages ; dense adhesions ; right tube hydrosalpinx, size of egg ; left tube a big pyo-salpinx ; recovery ; in good general health 8 months later. <i>Signs of cancer 2 years later. Cervix removed</i>
85	46	2 children (last 12 years)	R.	(History of gonococcal infection following marriage) ; recent bloody discharge ; tumour "as big as a fist" in pelvis	A few months	Feb. 1902, removal of right tube, very adherent ; uterus torn and sutured ; vaginal excision of uterus ; Sept. 1902, dyspepsia, epigastric pain ; March 1905, death 33 months after operation

Character of tumour.	Other parts involved.	Operator.	Reporter and reference.
tubes, strongly adherent, with papillary masses, no sign of malignancy microscope (see Case 3, abach)	None detected at first operation; deposits all over pelvis, parietal peritoneum, intestine and cecum, 2nd operation	Duret	Danel, "Double tumeur papillaire primitive des trompes de Fallope," 'Journ. des Sciences Med. de Lille,' Aug. 10, 1907, p. 121
Tube greatly dilated, filled with malignant papillomatous masses; right appendages, left uterus and its myoma and no sign of disease in	Metastatic nodule in broad ligament detected at operation	Rein	Zaretsky, "Papillomatous Tumour of Fallopian Tube," 1907 (Russian monograph), private correspondence, Oct. 1909
Tube formed a big cyst, with broken-down adenomatous tissue growing from mucosa of middle third; tube a hydrosalpinx, free from new growths, as were both	No metastases found at operation (careful search); uterine wall and mucosa healthy	Knauer	Schauenstein, "Ein Fall eines primären Tubenkarzinoms," 'Mittheil. des Vereines der Aerzte in Steiermark,' No. 2, 1908, p. 29
growth filled right tube, cylindrical epithelioma, converted certain points to flat cells and pearls	None; left hydrosalpinx free from growths	Orthmann	<i>Id.</i> , "Plattenepithelkarzinom der Tube," 'Muenchener med. Wochenschr.,' No. 27, 1907, p. 1344
Tube contained a papillary cancer and 2 pure malignant papillomatous deposits; left tube free from	Metastases evident at operation (Ovaries, uterus, bladder and transverse colon)	Kehrer	<i>Id.</i> , "Zur Kenntniss des primären Tubenkarzinoms," 'Monatsschr. f. Geb. u. Gyn.,' vol 27 (1908), p. 327
Tube a sausage-shaped mass, 3 inches diameter in middle; much pus; papilloma is adeno-carcinoma	None; right tube simple salpingitis; ovaries normal	Gemmell	<i>Id.</i> , "Primary Carcinoma of the Fallopian Tube," 'Journ. of Obst. and Gyn.,' vol. xiv (1908), p. 31 <i>Priv. corresp. 3/1/10</i>
Adeno-carcinoma of right tube; tube appeared normal at operation	No metastases observed at operation; ultimately gastric (?) cancer	Everke	<i>Id.</i> , "Primäres Tubenkarzinom," 'Monatsschr. f. Geb. u. Gyn.,' vol. xxviii (1908), p. 461

No.	Age, married or single	Children menstrua- tion	Side of tumour	Chief symptoms.	Duration of symptoms before operation.	Operation ; Result.
86	41	0 children ; menopause at 25	R.	Several acute attacks pelvic pain ; coagula passed ; hypo- gastric tumour to right of uterus simulating fibroid	10 months	Removal of uterus and appen- dages ; suppurating cyst ovary, cancerous right recovery, no recurrence 6 months later ; patient killed in accident 8 months later
87	52	? menopause 4 years	L.	Abdomen enlarging 2 years ; ovarian tumour detected ; no uterine hæmorrhage, no dis- charge of any kind	uncertain	Ovariectomy ; left tube, as as a thumb, adhered to ovary, cyst ; right appendage not recurrence noted 4 months death 6 months after opera-
88	27	2 children ; menstrua- tion normal	R.	Pelvic inflammation (puerperal) 4 years, another acute attack 2 years, local pain ever since ; free vaginal discharge, recently profuse, watery and occasionally brownish ; uterus fixed ; masses in lateral fornix and Douglas's pouch	Probably within 2 years	Removal of uterus, appendix and vermiform appendix covered
89	39 M.	2 children, 2 abortions ; menstrua- tion scanty	L.	(Retained placenta, curette used) ; last 10 periods scanty, fœtor at last period, then "tender left ovary" defined ; operation a month later	Over 10 Months	Ovariectomy ; right appendix not removed ; recovery ; no history
90	44	3 children ; menstrua- tion regular	L.	3 years free discharge watery fluid between periods ; abdomen swelling 1 year ; movable tumour left iliac fossa, separate from uterus, steady increase in size	3 years	Removal of uterus and appen- dages ; right hydrosalpinx tube formed big tumour ovaries normal ; excision of of omentum ; recovered after history
91	54 M.	1 abortion (30 years) ; menopause 2 years	L.	Free watery discharge followed menopause, pink at first, then colourless ; abdominal pains left side ; acute attack 14 days before admission into hospital ; hard mass left fornix, body of uterus enlarged	About 1½ years	Excision of a pelvic tumour strongly adherent to intestines recovery ; death from recurrence within a year
92	48 M.	3 children, 1 abortion (17 years) ; menstrua- tion obscured by hæmor- rhages	R.	Hæmorrhages at a few months' interval at first, then almost continuous ; fibroid uterus reach- ing to umbilicus, separate lobe in hypogastrium, reaching to right iliac fossa ; mass in Douglas's pouch	2 years	Abdominal panhysterectomy removal of appendages vermiform appendix ; no Douglas's pouch proved diseased left appendages tube greatly dilated ; reco- no sign of recurrence 10 months later

Character of tumour.	Other parts involved.	Operator.	Reporter and reference.
Left tube formed a big cyst; bulky mass, papillomatous epithelioma, grew on mucosa; decidual elements; cyst of left ovary not malignant	No metastases detected; uterus and left appendages normal	Chalot	Mériel, "Epithéliome papillaire ou déciduome de la trompe," 'Revue mens. de gyn. d'obst. et de péd.,' Sept. 1908
Incipient cancer of tube" (rel, Institut Pasteur); ovarian tumour seemed a compound cyst	General extension, marked in parietes, after operation	Delau- nay	<i>Id.</i> , "Cancer primitif de la trompe," 'Paris Chirurgical,' vol. i, p. 15 (1909)
2/3 right tube dilated, contents watery, blood-stained and encephaloid mass of malignant papilloma	None detected; left hydrosalpinx, ovaries, uterine walls and endometrium free from new growth	Norris	<i>Id.</i> , "Primary Carcinoma of the Fallopian Tube," 'Surgery, Gynæcology and Obstetrics,' vol. viii (1909), p. 272
As big as a lentil, upper and mid portion left tube; local epithelioma, involution of mucosa which was not otherwise involved; ovary sclerotic	No metastases observed	Leuret	Lorrain, "Epithélioma de la trompe utérine," 'Bulletins et mém. de la Soc. Anat. de Paris,' April 1909, p. 235
Age-shaped, 1½ lbs. weight; medullary contents in tubal cavity, not mucosa; "a peritoneoma" (Herrenschmidt and Engel), possibly an angiosarcoma X.	Metastatic nodule, great omentum	Gosset	<i>Id.</i> , "Sur un cas de tumeur primitive de la trompe," 'Annales de Gyn. et d'Obst.,' May 1909, p. 271
Waxy-looking tumour of left tube; cylindrical epithelioma, papillomatous in parts, where alveolar	Free dissemination after operation	Pozzi	Caraven and Lerat, "Epithélioma primitif de la trompe," 'Bulletins et mém. de la Soc. Anat. de Paris,' May 1909, p. 301
Left tube dilated, tuberos, and with medullary material, infiltrating atypical epithelioma	Secondary deposits detected in left ovary and uterine wall	Hartmann	Lecène, "Epithélioma primitif de la trompe," 'Annales de gynéc. et d'Obstét.,' July 1909, p. 418

Glennie, told me
that Borel considered that
it was an Endothelioma.

No.	Age. married or single	Children ; menstrua- tion	Side of tumour	Chief symptoms.	Duration of symptoms before operation.	Operation ; Result.
93	55	2 children	R. and L.	Tube formed a tumour which reached to umbilicus	?	Tubes amputated ; 4 months uterus removed per vagin death shortly afterwards recurrence
94	53	3 children	R. and L.	Distinct abdominal tumour	?	Panhysterectomy and remov appendages
95	—	—	Uni- lateral.	Evidence of chronic inflammatory pelvic disease ; no symptoms of any uterine disease	?	"Removed by a radical abdom operation" ; opposite tube cancerous
96	49	1 child (24 years) ; menopause 7 years	L.	Emaciation, distension of abdo- men ; ovarian tumour defined	7 months	Ovariectomy, large cystic ade of right ovary opening l ligament ; right tube non left ovary healthy, tube fo a big tumour
97	—	—	—	Clinical history lost	—	" Removed by operation "
98	56	3 children	—	Abdominal swelling, occasional pain	About 9 months	—
99	—	—	Uni- lateral, Side not recor- ded.	Symptoms of chronic inflamma- tion of appendages	—	Removal of one tube, dens hesions, rectum wounded ;
100	60 S.	1 child ; menopause at 47	L.	Large cyst reaching nearly to ensiform cartilage, and descend- ing into Douglas's pouch ; much pain, dysuria	Tumour noted abt. 5 months	Ovariectomy ; removal of a ovarian cyst burrowing in ligament ; recovered ; recur death from internal within two years ; no mortem

Character of tumour.	Other parts involved.	Operator.	Reporter and reference.
illomatous adeno-carcinoma of es	Uterus bore a small pedunculated adeno-carcinomatous growth close to orifice of one tube	Von Fran- qué	<i>Id.</i> , "Ueber maligne Erkrankun- gen der Tube* und Metastasen- bildung in Uterus," 'Verhandl. d. deutschen Gesell. f. Gynäk.,' Congress 9, 1901, p. 606; and Zangemeister, 'Beiträge z. klin. Chirurg.,' vol. 34, p. 99 (No. 45 in tables)
a tube formed a tumour as as a fist, filled with an adeno-carcinomatous growth	Endometrium bore secondary deposits, cells arranged as in tubal growth and <i>not</i> as in primary adeno-carcinoma of uterus	<i>Ibid</i>	Von Franqué and Zangemeister, <i>ibid.</i> No. 47* in Zangemeister's tables
ary cancer of one tube, the er showed only "salpingitis udo follicularis" chronic	Endometrium healthy; uterine lymphatic vessels plugged with cancer cells	<i>Ibid</i>	Von Franqué, 'Monatsschr. f. Geb. u. Gyn.' vol. xxii (1905), p. 152
st-horn shaped" body 6 in. g diameter; uterine half bore lignant papillomatous growth; tents clear serous fluid	—	Amann	Müller, "Ein Fall von primären Tubenkarzinom," 1896; Orth- mann, "Zur Kenntniss der malignen Tubenneubildungen," 'Zeitschr. f. Geb. u. Gyn.,' vol. lviii, p. 377
reatly enlarged tube—dense d cancerous growth, composed closely-packed spheroidal cells long columns	"No disease of the uterus or the other adnexa"	Mac- naugh- ton Jones, & C. Lock- yer	Macnaughton Jones, 'Practical Manual of Diseases of Women,' 9th Ed. (1904), p. 678, and private correspondence
—	—	Martin	'Pathologie and Therapie der Frauenkrankheiten,' 4th Ed. (1907), fig. 155, p. 387 and footnote
d growth in tube, true cancer . Cecil Earl, Dublin)	Uterus, ovaries and opposite tube not involved	Smyly	<i>Id.</i> , Private correspondence
primary villous carcinoma of Fallopian tube with secondary section of an ovarian cyst, lymphatic glands, uterus, etc." (Targett)	Papillomatous growths on serous coat of uterus and in Douglas's pouch	Doran	<i>Id.</i> and Targett. See text

Von Franqué's second case, No. 46 in Zangemeister's tables, is the same as No. 6 in my series, "Primary Sarcoma or Mixed
tumour of the Fallopian Tube" in this JOURNAL, "A Table of over 50 Complete Cases, &c.," Vol. VI, p. 293, and Zangemeister's
No. 48 (Schäfer-Krönig) is No. 7 in the same series. No. 95 above was reported by Von Franqué several years after 93, 94 (and also
No. 6 in the Sarcoma series) had been included in Zangemeister's list with additional (clinical) details given by Von Franqué himself.
The Hofmeier-Arendes case (No. 34 in my "Primary Cancer" series) must not be confused with any of Von Franqué's, which have
been reported by Arendes and Morinaga, as well as by Von Franqué and Zangemeister—hence some confusion.

